



SIEMENS

Site Controls Enterprise-wide Energy Management

Reduce energy use, maintenance costs, and your carbon footprint

A proven system from a global leader

www.siemens.com/sitecontrols

More effective control for sustainable savings

With nearly 900,000 locations, chain retail stores are among the largest commercial consumers of electrical power in the US. Spiraling energy costs and slow revenue growth are placing intense profit pressure on these retailers. Chain operators need a proven solution that automatically and systematically reduces energy consumption without impacting the customer experience.

Siemens' Site Controls™ Energy Management System (EMS) is a sophisticated, yet easy to use, energy and facilities management solution that helps companies face these new realities – and keeps them prepared for future opportunities.

This Web-based solution is designed to help large chains quickly realize a reduction in energy costs by typically 15 to 30% across an enterprise while gaining greater visibility and protecting the shopper experience.

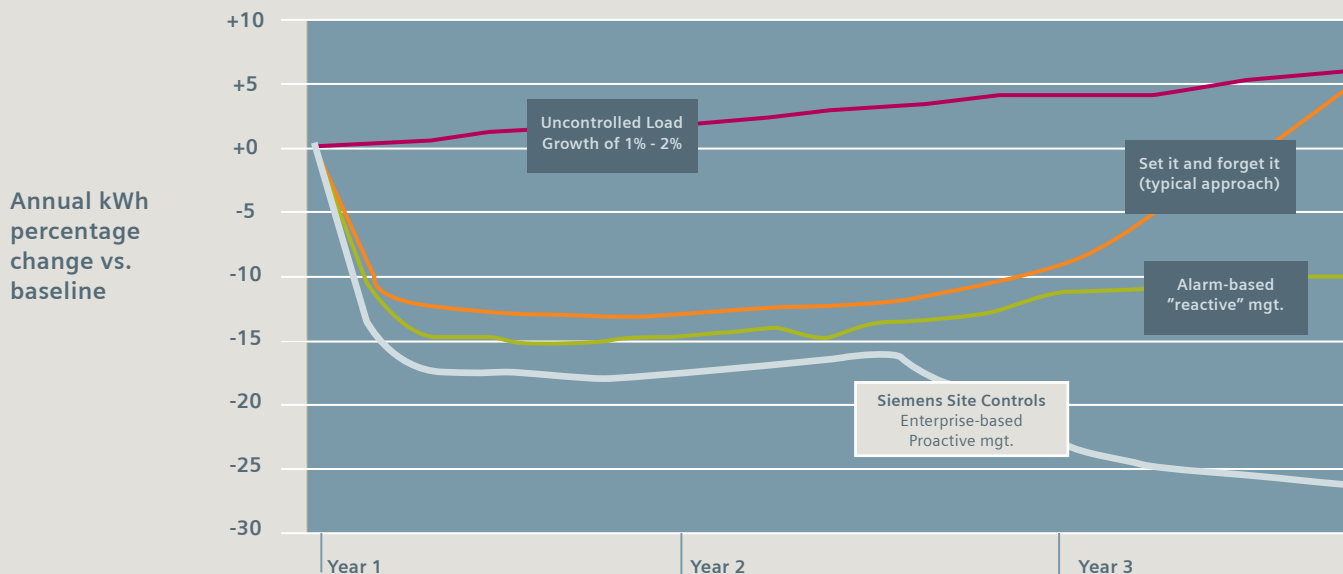
With a relatively small capital investment, Site Controls significantly reduces energy costs and helps improve shopper comfort through monitoring and controlling of Heating, Ventilation, and Air Conditioning (HVAC) systems, lighting, and signage. It's an integrated approach that has been proven effective in large chain Fortune 500 retailers, health clubs, restaurants, and branch banks across the country. Typically, cash-on-cash payback occurs in 18-24 months or less.

Sophisticated cloud platform and reliable on-site monitoring

Our proactive methodology, superior architecture and on-site capabilities translate into greater energy and maintenance savings than traditional approaches. With Siemens expertise and a cloud-hosted platform, your company can lower IT and administration costs, access continuous innovation through seamless software upgrades, and optimize and manage data across your enterprise.

This cloud-hosted, enterprise-wide solution, with sophisticated analytics and dashboards, integrates all hardware, software and communication required to provide real-time visibility and control across all locations – new and existing.

Siemens proactive enterprise-based management vs. traditional approaches





Proven results

The chart on the left shows actual customer data depicting the results of Siemens enterprise management methodology versus traditional approaches.

Line 1 – No controls. Over time, energy usage in an uncontrolled building will increase 1–2% per year due to HVAC wear and tear, building deterioration and plug load growth.

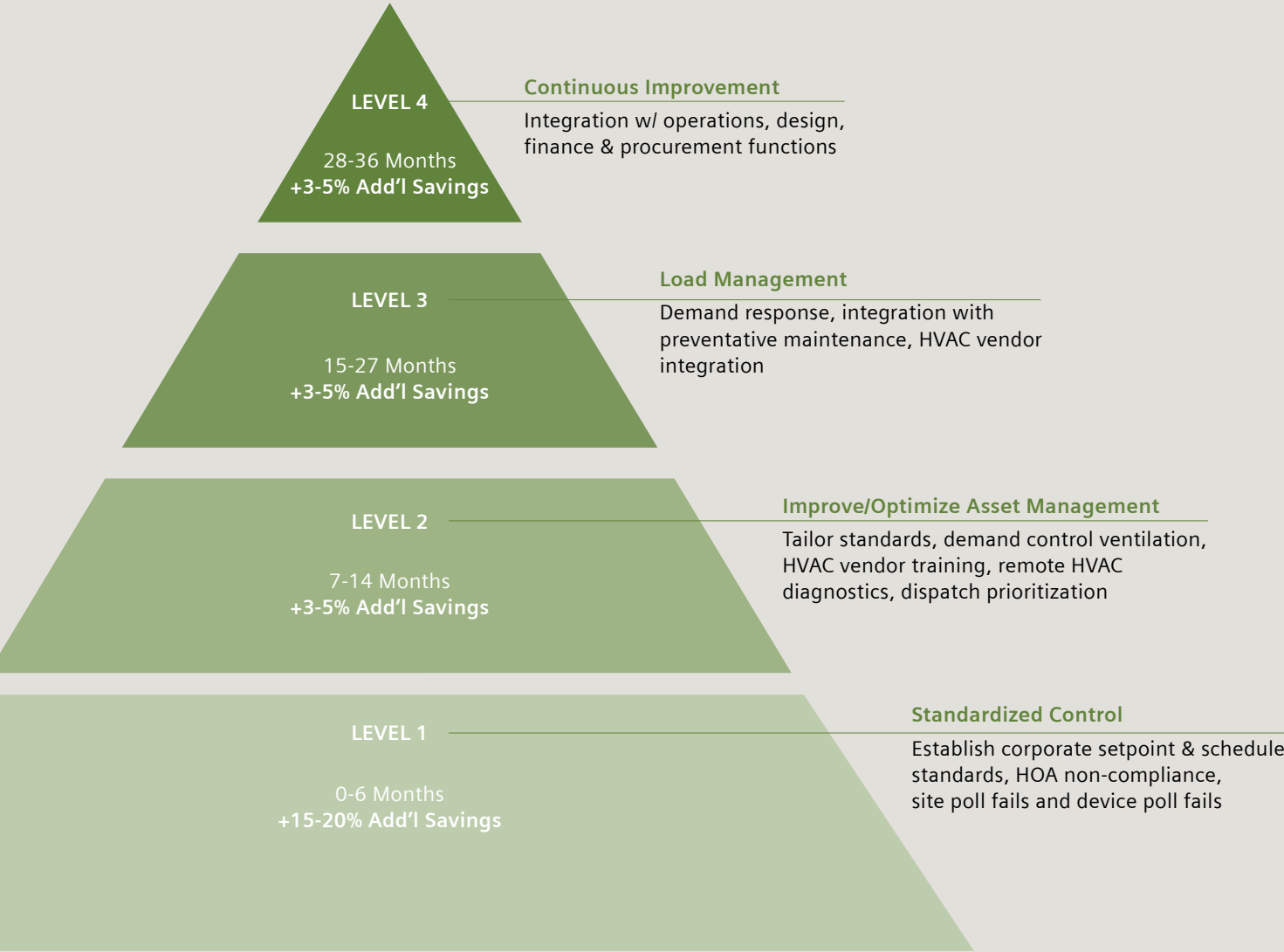
Line 2 – Set it and forget it. Installing an EMS without an above-site management process will yield savings initially, but savings will quickly diminish due to on-site overrides, unsupervised setpoint adjustments, undetected communication and sensor failures, and unauthorized changes by HVAC and lighting contractors.

Line 3 – Alarm-based “reactive” management. In a typical EMS system, alarms are “pushed” to users from each individual Rooftop Unit (RTU) or other device. Since these alarms cannot be effectively processed or configured at an enterprise level, the sheer volume of incoming data overwhelms facility staff, causing them to abandon the system and lose visibility to equipment performance and savings opportunities.

Line 4 – Enterprise proactive management. With the Site Controls Data Center, energy and facility managers are able to rapidly and effectively identify and resolve true equipment problems or site issues across the entire chain. Combined with integrated KPIs and Dashboards, continuous capability enhancements and the assistance of a dedicated Client Services team, we work together to ensure gains are maintained and increased over time.

Siemens Site Controls proactive management

As an industry leader and developer of advanced technology, Siemens has developed best practices for the successful implementation of energy management systems for multi-site retail chains.



“In 2005, we implemented the Siemens Site Controls EMS solution at 1,000+ locations. A 17% energy savings was achieved during our initial rollout; in 2010, continuous improvement efforts increased our savings to 25%.”

– Michaels Arts & Crafts Store executive



Compelling benefits of enterprise energy management

Enterprise-wide energy efficiency

Repeatedly proven to decrease energy at Fortune 500 companies with 100 sites or more; delivering energy savings of 10 to 30% across a chain, with results increasing over time.

Reduced maintenance

Reduce maintenance costs by thousands per year through remote equipment diagnosis and verification of service completion.

Operational visibility

Real-time intelligence into operating condition of sites and key equipment, helping companies improve asset efficiency and capital replacement analysis. Monitor a broad range of devices, from HVAC performance, environmental conditions, refrigeration, food safety, and much more.

Revenue generation

Generate cash through participation in utility load management such as Demand Response. Our completely automated Intelligent Load Management program ensures maximum revenues while minimizing risks which would result in underperformance penalties or impact the shopping experience.

Environmental sustainability







Improve sustainability branding by reducing emissions of greenhouse gases. For most retailers, 85% of Scope I and II emissions are from the impact of purchased electricity. By reducing store energy consumption by 20%, retailers can reduce their corporate carbon footprint by more than 17% – at a positive ROI.



With the Site Controls platform, a nationwide discount retailer has achieved significant savings:

19%	reduction in energy consumption
\$12 million	savings in energy annually
22 months	project payback
300%	project return on investment
\$0.10 per share	improvement in earnings per share (EPS)
\$240 million	sales increase required to attain an equivalent profit impact
10,400 cars	equivalent number of cars removed from the road to realize the same environmental impact

Comprehensive, cloud-computing solution offers a lower cost of ownership and superior results

Resources	Legacy System (Alarm "Push" Model)	SIEMENS Site Controls Web
Internal Help Desk	5-10 FTE's 	1-2 FTE's 
On-site Vendor Support	1 FTE 	NONE REQUIRED
Professional Services	2-3 FTE's 	INCLUDED
After Hours Desk	3-4 FTE's 	INCLUDED
IT Support	1 FTE 	HOSTED SOLUTION



An integrated energy management solution

Unlike traditional EMS products, Site Controls offers an integrated, comprehensive solution, consisting of on-site hardware, implementation services, a cloud-hosted Data Center and a dedicated Client Services to ensure energy and maintenance savings are sustained and expanded over time.

Above-site visibility and control

Siemens offers the ability to effectively manage multiple sites with minimal administrative overhead. As a cloud-hosted solution, the Site Controls Data Center provides sophisticated analytics, real-time KPIs and operational dashboards without the IT and administrative costs of on-premise computing.

Consistency across the enterprise

Monitor and control: HVAC, interior lighting, exterior lighting, signage, and air quality. By maintaining your corporate standpoints, the Site Controls platform ensures energy savings, customer comfort, and a consistent customer experience across your enterprise.

Remote HVAC and maintenance diagnostics

Standardizing setpoints, eliminating system overrides, scheduling (occupancy), comfort, and maintenance via

identification of failed mechanics, we monitor information and analytics to use energy smartly and maintain equipment proactively. This allows internal or outsourced maintenance coordinators to diagnose and reset/resolve HVAC and lighting remotely avoiding costly service calls. It also enables verification of contractor repair in real time.

Continuous commissioning

Pro-active management helps maintain optimal equipment performance over time, effectively providing a continuous commissioning capability to ensure systems perform to original specifications.

Open architecture vs. proprietary solution

Lowers costs and integrates with existing information systems enabling you to disseminate key EMS information across your extended enterprise.

Extensible platform monitors virtually any on-site device

The Site Controls platform integrates with a variety of equipment, from air quality sensors to hot water heaters to rooftop solar energy. The platform is designed to be "future-proof" enabling you to manage the buildings of today – and of the future.

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Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming, and resource shortages.

Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users.

Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

"We are the preferred partner for energy-efficient, safe, and secure buildings and infrastructure."